REMARKS

The foregoing amendments and these remarks are in response to the Office Action dated October 6, 2004. This amendment is timely filed.

At the time of the Office Action, claims 1-11 were pending in the application. In the Office Action, claims 1-11 were rejected under 35 U.S.C. §103(a). The rejections are discussed in more detail below. New claims 12-14 are added herein to present further definitions of the invention.

I. Claim Rejections on Art

Claims 1-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over German Patent No. 19731305A1 (DE '305). Claim 11 was rejected under 35 U.S.C. §103(a) as being unpatentable over DE '305 in view of U.S. Patent No. 4,475,266 to Suska as applied to claim 1, and further in view of U.S. Patent No. 5,542,505 to Kempf.

Prior to addressing the rejections on art, a brief review of claim 1 is believed appropriate. Claim 1 relates to a clearance free hinge for an automotive vehicle seat. The seat comprises a first hinge arm and a second hinge arm, each hinge arm having a bore. The bore of the first hinge arm comprises a retaining zone and a compensation zone located one behind the other. The compensation zone has greater radial inner dimensions than the retaining zone. Further, the compensation zone is defined by an inner lining and a step. The step is oriented substantially in a radial direction and is contiguous to the retaining zone. There is a hinge pin that extends through the bores and a shim member that rests against the inner lining, the step and the hinge pin. The shim member, during assembly of the hinge, is pushed axially toward the step whereby the shim member deforms and fills out any space between hinge pin, step and inner lining.

Applicant respectfully submits the pending claims are patentable over the prior art. In particular, Applicant notes that DE '305 does not teach a retaining zone as recited by claim 1. Applicant's specification states that the retaining zone or supporting zone provides for accurate positioning, while the compensation zone provides for compensation for the clearance of and for selectively receiving the shim member." (See page 3, lines 11-13 of Applicant's specification).

Further, page 2, lines 22-24 of Applicant's specification states that the bore has a retaining zone that quite closely surrounds the hinge pin with a clearance within manufacturing tolerances.

In DE '305 there is no delimited retaining zone. DE '305 only shows compensation zones and no retaining zone. As can be clearly seen in Fig. 6b of DE '305 the shim not only fills the truncated triangularly shaped space designated 17 in Fig. 6a, but also the hollow cylindrical space 16; see Fig. 7b and other figures, too. In DE '305, item 16 is a hollow cylindrical portion, and item 17 is a bezel. As is known to a person having ordinary skill in the art, a bezel is only an entry portion. In any case, DE '305 does not teach or suggest any differentiation between a compensation zone and a retaining zone, such as the different radial inner dimensions defined in claim 1. DE '305 provides for entry of the shim member into any gap provided. DE '305 clearly shows visible gaps between hinge pin 4 a hinge arm, see all figures of DE '305.

DE '305 also does not teach a step within the bore, as defined in claim 1. This step delimits the compensation zone. In DE '305 the frontmost inserted portion of shim 10 (10a, 10b) becomes rather small, and is not defined. The shape, thickness, and length of this frontmost portion varies from hinge to hinge in DE '305, but such a variance would not be acceptable in series production. Thus, a person having ordinary skill in the art would not seek to use the teaching of DE '305 in series production.

Furthermore, DE '305 does not teach a clearance-free hinge in which secure clearance compensation is achieved over a predeterminable length. Notably, in DE '305 the length is not predeterminable.

Turning now to Suska, Suska is also not relevant to the pending claims. Suska is directed to a door hinge (see col. 1, lines 5-10). A person of ordinary skill in the art who intends to improve a joint of a vehicle seat would never envisage to search in the technical field of door hinges. In addition, Suska does not teach forcing bushing 28 or 40 into the bore of the knuckle 14. Suska also does not teach providing secure clearance compensation over a predeterminable length.

For doors, clearance compensation is not relevant because the weight of the doors always preloads the door hinges and any play cannot be noticed or felt. Door hinges very often do have play, facilitating removing and inserting a door.

Suska provides bearing surfaces for silent door movement, specifically a first lateral bearing surface (col. 3, line 12) and a second lateral bearing surface (col. 3, line 62). A person of ordinary skill in the art will read Suska as a transverse annular shoulder that has a large surface bearing at 32 and a direct transfer of the load caused by the weight of the door, into the knuckle. Suska describes the transverse annular shoulder not in conjunction with any reduction of play, but in conjunction with bearing and separation of the two hinge leaves.

Additionally, in Suska, items 40 and 42 are not a shim. Item 40 is a bushing (see col. 3, line 34) and item 42 is a radially outwardly extending flange of 40. This flange 42 provides for the second bearing surface (for axial loads, not radial loads). Thus, Suska does not teach the shim members defined in the independent claims.

In addition, neither DE '305 nor Suska teach where to locate the step. Claim 1 recites a step which is contiguous to the retaining zone. The position of the step is not specified in Suska, nor does Suska mention any step separating a retaining zone from a compensation zone.

For the foregoing reasons, claim 1 is believed to relate to patentable subject matter, and to be in condition for allowance. The dependent claims are also believed allowable because of their dependence upon an allowable base claim, and because of the further features recited. New claims 12-14 are presented, which are also believed allowable.

II. Conclusion

Applicant has made every effort to present claims which distinguish over the prior art, and it is believed that all claims are in condition for allowance. Nevertheless, Applicant invites the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the

prosecution of the application to an allowance. In view of the foregoing remarks, Applicant respectfully requests reconsideration and prompt allowance of the pending claims.

Respectfully submitted,

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